

**Amendments to the Claims:**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

- 1-63. (Canceled)
64. (Currently Amended) ~~An isolated~~ Isolated heparanase (endo- $\beta$ -D-glucuronidase) protein, said heparanase protein having heparanase catalytic ~~(endo- $\beta$ -D-glucuronidase)~~ activity or being cleavable so as to acquire said heparanase catalytic activity, wherein said heparanase protein including consists essentially of a polypeptide at least 90% 70% homologous to SEQ ID NO: 10 or to a portion thereof, said protein being capable of eliciting an anti-heparanase antibody.
65. (Currently Amended) A pharmaceutical composition ~~comprising, as an active ingredient,~~ consisting essentially of the isolated heparanase protein of claim 64, and a pharmaceutically acceptable carrier.
66. (Currently Amended) A preparation comprising a protein molecules, wherein all protein molecules in said preparation together define a protein component, said protein component consisting essentially of heparanase (endo- $\beta$ -D-glucuronidase) protein, said heparanase protein having heparanase (endo- $\beta$ -D-glucuronidase) catalytic activity or being cleavable so as to acquire said heparanase catalytic activity, wherein said heparanase protein including consists essentially of a polypeptide at least 90%-70% homologous to SEQ ID NO: 10 or to a portion thereof.
67. (Previously Presented) The preparation of claim 66, wherein said polypeptide is characterized by being recombinant.
- 68-70. (Canceled)
71. (Currently Amended) ~~An isolated~~ Isolated heparanase (endo- $\beta$ -D-glucuronidase) protein, said heparanase protein having heparanase catalytic ~~(endo- $\beta$ -D-~~

~~glucuronidase~~) activity or being cleavable so as to acquire said heparanase catalytic activity, wherein said protein including includes a polypeptide at least 95%-70% homologous to SEQ ID NO: 10 or a portion thereof, said protein being capable of eliciting an anti-heparanase antibody.

72. (Currently Amended) A pharmaceutical composition ~~comprising, as an active ingredient,~~ consisting essentially of the isolated heparanase protein of claim 71, and a pharmaceutically acceptable carrier.

73-75. (Canceled)

76. (Currently Amended) ~~A recombinant~~ Recombinant heparanase (endo- $\beta$ -D-glucuronidase) protein, said heparanase protein having heparanase catalytic (~~endo- $\beta$ -D-glucuronidase~~) activity or being cleavable so as to acquire said heparanase catalytic activity, ~~said protein being purified close to homogeneity and~~ wherein said heparanase protein including consists essentially of a polypeptide at least 90%-70% homologous to SEQ ID NO: 10 or to a portion thereof and is purified close to homogeneity.

77. (Currently Amended) The protein of claim 76, wherein said heparanase protein includes ~~consists essentially of~~ a polypeptide at least 95% homologous to SEQ ID NO: 10 or to a portion thereof.

78. (Currently Amended) A pharmaceutical composition ~~comprising, as an active ingredient,~~ consisting essentially of the isolated recombinant heparanase protein of claim 76, and a pharmaceutically acceptable carrier.

79. (Canceled)

80. (New) The protein of claim 64, wherein said heparanase protein is recombinant.

81. (New) The protein of claim 64, wherein said heparanase protein consists essentially of a polypeptide at least 80% homologous to SEQ ID NO: 10 or to a portion thereof.

82. (New) The protein of claim 64, wherein said heparanase protein consists essentially of a polypeptide at least 90% homologous to SEQ ID NO: 10 or to a portion thereof.

83. (New) The protein of claim 64, wherein said heparanase protein consists essentially of a polypeptide at least 95% homologous to SEQ ID NO: 10 or to a portion thereof.

84. (New) The protein of claim 64, wherein said heparanase protein consists essentially of SEQ ID NO: 10 or a portion thereof.

85. (New) The pharmaceutical composition of claim 65, consisting of said isolated heparanase protein and said pharmaceutically acceptable carrier.

86. (New) The preparation of claim 66, wherein said heparanase protein consists essentially of a polypeptide at least 80% homologous to SEQ ID NO: 10 or to a portion thereof.

87. (New) The preparation of claim 66, wherein said heparanase protein consists essentially of a polypeptide at least 90% homologous to SEQ ID NO: 10 or to a portion thereof.

88. (New) The preparation of claim 66, wherein said heparanase protein consists essentially of a polypeptide at least 95% homologous to SEQ ID NO: 10 or to a portion thereof.

89. (New) The preparation of claim 66, wherein said heparanase protein consists essentially of SEQ ID NO: 10 or a portion thereof.

90. (New) The preparation of claim 66, wherein said protein component consists of said heparanase protein.

91. (New) The protein of claim 71, wherein said heparanase protein is recombinant.

92. (New) The protein of claim 71, wherein said heparanase protein includes a polypeptide at least 80% homologous to SEQ ID NO: 10.

93. (New) The protein of claim 71, wherein said heparanase protein includes a polypeptide at least 90% homologous to SEQ ID NO: 10.

94. (New) The protein of claim 71, wherein said heparanase protein includes a polypeptide at least 95% homologous to SEQ ID NO: 10.

95. (New) The protein of claim 71, wherein said heparanase protein includes SEQ ID NO: 10.

96. (New) The pharmaceutical composition of claim 72, consisting of said isolated heparanase protein and said pharmaceutically acceptable carrier.

97. (New) A preparation comprising protein molecules, wherein all protein molecules in said preparation together define a protein component, said protein component consisting essentially of heparanase (endo- $\beta$ -D-glucuronidase) protein, said heparanase protein having heparanase catalytic activity or being cleavable so as to acquire said heparanase catalytic activity, wherein said heparanase protein includes a polypeptide at least 70% homologous to SEQ ID NO: 10.

98. (New) The preparation of claim 97, wherein said heparanase protein includes a polypeptide at least 80% homologous to SEQ ID NO: 10.

99. (New) The preparation of claim 97, wherein said heparanase protein includes a polypeptide at least 90% homologous to SEQ ID NO: 10.

100. (New) The preparation of claim 97, wherein said heparanase protein includes a polypeptide at least 95% homologous to SEQ ID NO: 10.

101. (New) The preparation of claim 97, wherein said heparanase protein includes SEQ ID NO: 10.

102. (New) The preparation of claim 97, wherein said protein component consists of said heparanase protein.

103. (New) The protein of claim 76, wherein said heparanase protein consists essentially of a polypeptide at least 80% homologous to SEQ ID NO: 10 or to a portion thereof.

104. (New) The protein of claim 76, wherein said heparanase protein consists essentially of a polypeptide at least 90% homologous to SEQ ID NO: 10 or to a portion thereof.

105. (New) The protein of claim 76, wherein said heparanase protein consists essentially of SEQ ID NO: 10 or a portion thereof.

106. (New) The pharmaceutical composition of claim 78, consisting of said recombinant heparanase protein and said pharmaceutically acceptable carrier.

107. (New) Recombinant heparanase (endo- $\beta$ -D-glucuronidase) protein, said heparanase protein having heparanase catalytic activity or being cleavable so as to acquire said heparanase catalytic activity, wherein said heparanase protein includes a polypeptide at least 70% homologous to SEQ ID NO: 10 and is purified close to homogeneity.

108. (New) The protein of claim 107, wherein said heparanase protein includes a polypeptide at least 80% homologous to SEQ ID NO: 10.

109. (New) The protein of claim 107, wherein said heparanase protein includes a polypeptide at least 90% homologous to SEQ ID NO: 10.

110. (New) The protein of claim 107, wherein said heparanase protein includes a polypeptide at least 95% homologous to SEQ ID NO: 10.

111. (New) The protein of claim 107, wherein said heparanase protein includes SEQ ID NO: 10.

112. (New) A pharmaceutical composition consisting essentially of the recombinant heparanase protein of claim 76, and a pharmaceutically acceptable carrier.

113. (New) The pharmaceutical composition of claim 112, consisting of said recombinant heparanase protein and said pharmaceutically acceptable carrier.